We claim:

1. A nucleated polyolefin having alkali and alkaline earth metal salts of alcuritic acid of formula 1 and shelloic acid of formula 2 present therein as the nucleating agent

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Formula 2

2. A process for the preparation of a nucleated polyloefin comprising mixing a polyolefin with a nucleating agent selected from the group consisting of alkali and alkaline earth metal salts of aleuritic acid of formula 1 and shelloic acid of formula 2 or a mixture thereof and extruding the mixture at minimum temperature of melting point of the polyolefin to obtain the nucleate polyolefin.

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Formula 2

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- 3. A process as claimed in claim 2 wherein the polyolefin is selected from the group consisting of polyolefin polymers of an aliphatic olefin and copolymers containing at least one aliphatic olefin and one or more ethylenically unsaturated comonomers.
- 4. A process as claimed in claim 3 wherein the comonomer is present in an amount of 10% or less based on the weight of olefin.
- A process as claimed in claim 2 wherein the polyolefin polymer comprises polymers and copolymers of aliphatic mono olefins containing two to six carbon atoms having molecular weight of 30,00,000 to 5,00,000.
- 6. A process as claimed in claim 5 wherein the molecular weight of the polyolefin is in the range of 30,000 to 3,00,000.
 - 7. A process as claimed in claim 2 wherein the polyolefin is selected from the group consisting of polyethylene, polypropylene and ethylene-propylene copolymers.\
- A process as claimed in claim 2 wherein the nucleating agent is obtained by neutralizing the aleuritic and shelloic acids with an alkali metal hydroxide followed by removal of water under reduced pressure at a temperature of about 80° C followed by further drying at about 120°C under reduced pressure.
- 9. A process as claimed in claim 2 wherein the nucleating agent is prepared by treating neutral aqueous solution of alkali salts of aleuritic and shelloic acids with a equimolar solutions of alkaline earth chlorides, washing the precipitated salts with water and drying at 1200°C under reduced pressure and isolating the water soluble salts by removal of water and grinding the salts in mortar and pestle.
- 10. A process as claimed in claim 2 wherein the metal salt comprises a salt of sodium, potassium, lithium, calcium and aluminum.
- 11. A process as claimed in claim 2 wherein the quantity of nucleating agent used in polylefin is not less than 0.2% w/w based on polyolefin.